

# bae urban economics

## Draft Interim Memorandum

**To:** Margot Ernst, City of Walnut Creek

**CC:** James Carney, M-Group

**From:** Stephanie Hagar

**Date:** June 21, 2019

**Re:** Interim Financial Feasibility Analysis – Walnut Creek Density Bonus Ordinance

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This memorandum presents a high-level summary of findings from a static proforma analysis that BAE Urban Economics (BAE) conducted in the first quarter of 2019 to evaluate the impact of a density bonus on the financial feasibility of new residential development in Walnut Creek, California. These interim findings will be incorporated into a full financial feasibility analysis related to the City's Density Bonus Ordinance, which will evaluate potential changes to the ordinance, provide detailed information on methodology, and a full set of findings. The interim findings presented in this memorandum are intended for internal discussion between the consultant team and City staff.

### Methodology

This analysis involved preparation of static proforma financial feasibility models for hypothetical townhouse ownership developments and multifamily rental developments in Walnut Creek. The static proforma models represent a simplified form of financial feasibility analysis that developers often use at a conceptual level of planning for a development project, as an initial test of financial feasibility for a development concept, to screen for viability. For each of the two residential product types, the analysis included an evaluation of one project that complies with baseline zoning requirements and one project that receives a density bonus and other incentives or concessions in exchange for providing affordable units on site, based on the City's existing Density Bonus Ordinance.

The proforma models are structured to calculate the residual land value associated with each development program. The calculation for residual project value starts with the market value of the completed project at stabilization and then deducts total development costs and developer profit. The residual land value approximates the maximum amount that a developer should be willing to pay for a given site, based on the value of the project that the developer would build on that site. Developers typically seek to pay less than the full residual land value

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to allow for transaction costs for the property sale, financing costs, and other expenses. In addition, a developer will offer a price that is lower than the residual land value if possible, in order to obtain additional profit from a project. In general, a high residual land value indicates high profit potential, and therefore a more attractive development opportunity relative to a project that generates a low residual land value.

BAE formulated assumptions for the proforma analysis using information from a variety of sources, as will be detailed in the full forthcoming financial feasibility analysis. All assumptions are shown in the proformas on the following pages.

Multifamily Rental Financial Pro Forma Analysis, Walnut Creek, 2019

Development Program Assumptions			Cost and Income Assumptions		Development Cost Analysis			Valuation Analysis					
Site Characteristics	Baseline	Density Bonus	Development Costs		Hard Costs		Baseline	Density Bonus	Projected Revenue		Baseline	Density Bonus	
Site Size (sf)	43,560	43,560	Construction Hard Costs		Site Work		\$1,306,800	\$1,306,800	Gross Annual Income		\$3,781,200	\$4,853,538	
Site Size (acres)	1.0	1.0	Site Work, per site sf		\$30	Residential	\$33,128,100	\$44,761,500	Less: Vacancy		(\$189,060)	(\$242,677)	
Development Program Characteristics			Residential (wood frame), per rentable sf		\$450	Podium Parking	\$3,867,500	\$3,867,500	Less: Operating Expenses		(\$1,100,000)	(\$1,485,000)	
	Total Dwelling Units	100	135	Podium Parking, per space		\$45,500	Underground Parking	\$2,145,000	\$0	Net Operating Income (NOI)		\$2,492,140	\$3,125,861
	Market-Rate Units	100	124	Underground Parking, per space		\$65,000	Underground Storage	\$650,000	\$0				
	Studios	7	9	Storage, per sf		\$130	Total Hard Costs	\$41,097,400	\$49,935,800	Capitalized Project Value		\$55,380,889	\$69,463,580
	One-Bedrooms	60	73	Soft Costs (as a % of hard costs) (a)		20%	Soft costs (a)	\$8,219,480	\$9,987,160	Less Total Development Costs		(\$66,794,572)	(\$81,603,750)
	Two-Bedrooms	33	42	Impact Fees (per unit) - baseline (b)		\$28,131	Impact fees	\$2,813,108	\$3,797,695	Residual Land Value		(\$11,413,683)	(\$12,140,170)
	Affordable Units (Very Low Income)	0	11	Impact Fees (per unit) - density bonus (b)		\$14,418	Developer Fee	\$2,465,844	\$2,996,148	Residual Land Value/Unit		(\$114,137)	(\$89,927)
	Studios	0	1	Developer Fee (as % of hard and soft costs) (d)		5%	Developer Fee	\$2,465,844	\$2,996,148				
	One-Bedrooms	0	7	Contingency (as % of hard and soft costs)		5%	Contingency Fee	\$2,465,844	\$2,996,148				
	Two-Bedrooms	0	3	Developer Profit (as % of total project costs)		12%	Total Soft Costs	\$15,964,276	\$19,777,151				
			Operating Revenues & Expenses		Financing Costs								
Average Unit Size (sf)			Rents (per unit/month) (c)		Total Loan Amount		\$39,943,173	\$48,799,066					
Studios	544	544	Market-Rate Studios		\$2,350	Interest	\$1,977,187	\$2,415,554					
One-Bedrooms	641	641	Market-Rate One-Bedrooms		\$2,750	Points	\$599,148	\$731,986					
Two-Bedrooms	950	950	Market-Rate Two-Bedrooms		\$4,050	Total Financing Costs	\$2,576,335	\$3,147,540					
Built Project Density (units per acre)	100	135	Affordable Studios		\$973	Developer Profit	\$7,156,561	\$8,743,259					
			Affordable One-Bedrooms		\$1,111	Total Development Costs (Excl. Land)	\$66,794,572	\$81,603,750					
Net Rentable (% of gross res. area)	85%	85%	Affordable Two-Bedrooms		\$1,239	Cost per residential sf	\$771	\$697					
Net Rentable (sf)	73,618	99,470	Vacancy		5%	Cost per residential unit	\$667,946	\$604,472					
Gross Building Area (sf)	86,609	117,024	Operating Expenses (per unit/year)		\$11,000								
Built Project FAR (excluding parking)	2.0	2.7											
			Construction Financing										
Total Number of Parking Spaces	118	85	Loan to Cost Ratio		70%								
Above-Ground Podium Spaces	85	85	Interest Rate		5.50%								
Underground Spaces	33	-	Loan Fees		1.5%								
Parking Ratio (spaces per unit)	1.18	0.63	Construction Period (months)		18								
Storage Space (sf)	5,000	-	Avg. Outstanding Balance During Construction		60%								
			Capitalization Rate		4.50%								

Notes:

(a) Soft costs shown here exclude impact fees, financing costs, contingency, and developer fee, each of which is calculated separately in this proforma.

(b) Includes estimates of the following FY 2018-19 development impact fees: Parkland Dedication, Inclusionary Housing In-Lieu Fee (baseline project only), Public Art, Traffic Impact Mitigation, General Plan Fee, Walnut Creek School District Impact Fee, Acalanes Union High School District Impact Fee, County Drainage Impact Fee, and Tree Mitigation Fee.

(c) Market-rate rent assumptions are based on the January 2019 rental rates for newly-constructed multifamily rental properties in Walnut Creek, according to data from CoStar. Affordable rents reflect the affordable rent for very low-income households, assuming a household size equal to the number of bedrooms in the unit plus one and rent plus utilities equal to 30 percent of gross household income.

(d) A developer fee is included to cover the costs of managing development of project; the developer fee does not represent profit.

Source: BAE, 2019.

Townhome Financial Pro Forma Analysis, Walnut Creek, 2019

Development Program Assumptions			Cost and Income Assumptions		Development Cost Analysis			Valuation Analysis			
	Baseline	Density Bonus	Development Costs		Hard Costs		Baseline	Density Bonus	Projected Revenue	Baseline	Density Bonus
Site Size (sf)	43,560	43,560	Construction Hard Costs		Site Work		\$958,320	\$958,320	Sales Revenue	\$15,760,000	\$19,448,574
Site Size (acres)	1.0	1.0	Site Work, per site sf (incl. surface parking)	\$22	Residential Units		\$6,336,000	\$8,574,500	Less Marketing Costs	(\$945,600)	(\$1,166,914)
Gross Building Area (sf)	23,040	31,180	Residential (wood frame), per sf	\$275	Total Hard Costs		\$7,294,320	\$9,532,820	Less Total Development Costs	(\$12,243,333)	(\$15,347,760)
Built Project FAR (excluding parking)	0.5	0.7	Soft Costs (as a % of hard costs) (a)	20%					Residual Land Value	\$2,571,067	\$2,933,899
Built Project Density (units per acre)	14	19	Impact Fees (per unit) - baseline (b)	\$54,812	Soft costs (a)	\$1,458,864	\$1,906,564				
			Impact Fees (per unit) - density bonus (b)	\$24,835	Impact fees	\$767,365	\$471,864	Residual Land Value per Unit	\$183,648	\$154,416	
Total Dwelling Units	14	19	Contingency (as % of hard and soft costs)	5%	Contingency Fee	\$437,659	\$571,969				
Market-Rate Units	14	17	Developer Profit (as % of total project costs)	18%	Total Soft Costs	\$2,663,888	\$2,950,397				
Two-Bedrooms	8	10			Financing Costs						
Three-Bedrooms	6	7	Operating Revenues & Expenses		Total Loan Amount		\$6,472,835	\$8,114,091.32			
Affordable Units (Very Low Income)	0	2	Sale Price (c)		Interest		\$320,405	\$401,648			
Two-Bedrooms	0	1	Market-Rate Two-Bedrooms	\$1,040,000	Points		\$97,093	\$121,711			
Three-Bedrooms	0	1	Market-Rate Three-Bedrooms	\$1,240,000	Total Financing Costs		\$417,498	\$523,359			
			Affordable Two-Bedrooms	\$171,533	Developer Profit		\$1,867,627	\$2,341,184			
Average Unit Size (sf)			Affordable Three-Bedrooms	\$197,040	Total Development Costs (Excl. Land)		\$12,243,333	\$15,347,760			
Two-Bedrooms	1,380	1,380	Construction Financing		Cost per residential sf		\$531	\$492			
Three-Bedrooms	2,000	2,000	Loan to Cost Ratio	65%	Cost per residential unit		\$874,524	\$807,777			
Total Number of Parking Spaces	30	23	Interest Rate	5.50%							
Garage	28	19	Loan Fees	1.5%							
Surface	2	4	Construction Period (months)	18							
Parking Ratio (spaces per unit)	2.14	1.21	Avg. Outstanding Balance During Construction	60%							
			Marketing Costs (as a % of sale price)	6.0%							

Notes:

(a) Soft costs shown here exclude impact fees, financing costs, contingency, and developer fee, each of which is calculated separately in this proforma.

(b) Includes estimates of the following FY 2018-19 development impact fees: Parkland Dedication, Inclusionary Housing In-Lieu Fee (baseline project only), Public Art, Traffic Impact Mitigation, General Plan Fee, Walnut Creek School District Impact Fee, Acalanes Union High School District Impact Fee, County Drainage Impact Fee, and Tree Mitigation Fee.

(c) Market-rate sale price assumption based on the sale price for comparable townhomes built in Walnut Creek in 2018. Affordable sale prices reflect the affordable sale price for very low-income households, assuming a household size equal to the number of bedrooms in the unit plus one and that payments toward mortgage principal and interest, property taxes, insurance, and HOA fees total 35 percent of gross household income.

Source: BAE, 2019.

## Sensitivity Analysis

BAE conducted sensitivity testing on the multifamily rental analysis shown in the proformas above to test the effect that changes to hard construction costs and market-rate rents would have on residual land values. The results of the sensitivity analysis are shown below. In all cases, all assumptions other than the assumption identified in the left-hand column were held constant as shown in the above proformas.

**Table: Multifamily Rental Development Sensitivity Analysis Results**

Change to Multifamily Rental Development Assumptions	Residual Land Value per Site Sq. Ft.		Residual Land Value per Unit (approx.)	
	Baseline	Density Bonus	Baseline	Density Bonus
Decreased hard construction costs to \$350 per net rentable sq. ft.	\$1	\$77	\$562	\$25,000
Decreased hard construction costs to \$325 per net rentable sq. ft.	\$67	\$166	\$29,000	\$54,000
Increased market-rate rents by 10 percent	Negative	Negative	Negative	Negative
Increased market-rate rents by 15 percent	\$13	\$63	\$6,000	\$20,000
Increased market-rate rents by 20 percent	\$104	\$177	\$46,000	\$57,000

## Interim Findings

Key interim findings from the financial feasibility analysis include:

- The townhouse developments modeled in this analysis are financially feasible at both the baseline level and the density bonus level. Of the two townhouse prototypes, the prototype that would receive a density bonus would generate a higher residual land value than the baseline prototype, which indicates that the density bonus project would likely be more financially attractive to a developer than the baseline project.
- The multifamily rental development prototype is not feasible at either the baseline density or the density bonus level, based on current market and development conditions. Both the baseline project and the density bonus project result in a negative residual land value, meaning that a developer would not pursue either project in the current market.
- The finding that the multifamily rental development is not feasible is consistent with current development conditions in cities throughout the Bay Area, where significant recent increases in construction costs have impacted the feasibility of new multifamily rental development. While multifamily rental rates have also increased, the pace of the increase in rents has not matched the pace of the increase in construction costs. Developers and other real estate professionals expect that the current imbalance between construction costs and rents will even out over time, at which point

multifamily rental development will become more feasible. This correction will require increases in rents, decreases in construction costs, or some combination of rent increases and construction cost decreases.

- Sensitivity testing on the multifamily rental development indicates that the density bonus project generates a significantly higher residual land value than the base project in all scenarios tested that result in a potentially feasible project. This indicates that the density bonus will likely improve the financial attractiveness of the multifamily rental prototype, relative to a project at the baseline level, at a future point in time when the financial feasibility of multifamily rental development improves.